

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-19. (canceled)

20. (previously presented) An arithmetic performance attribution method for determining portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , comprising the steps of:

(a) determining coefficients $(A + \alpha_t)$, where the values α_t are defined as

$$\alpha_t = \left[\frac{R - \bar{R} - A \sum_{k=1}^T (R_k - \bar{R}_k)}{\sum_{k=1}^T (R_k - \bar{R}_k)^2} \right] (R_t - \bar{R}_t),$$

where A has any predetermined value, R_t is a portfolio return for period t , \bar{R}_t is a benchmark return for period t , R is determined by

$$R = \left[\prod_{t=1}^T (1 + R_t) \right] - 1,$$

and \bar{R} is determined by

$$\bar{R} = \left[\prod_{t=1}^T (1 + \bar{R}_t) \right] - 1;$$

and

(b) determining the portfolio performance as

$$R - \bar{R} = \sum_{t=1}^T (A + \alpha_t)(R_t - \bar{R}_t).$$

21. (previously presented) The method of claim 20, wherein A is

$$A = \frac{1}{T} \left[\frac{(R - \bar{R})}{(1 + R)^{1/T} - (1 + \bar{R})^{1/T}} \right], \text{ where } R \neq \bar{R},$$

or for the special case $R = \bar{R}$:

$$A = (1 + R)^{(T-1)/T}.$$

22. (previously presented) The method of claim 20, wherein $A = 1$.

23. (previously presented) The method of claim 20, wherein step (b) is performed by determining the portfolio performance as

$$R - \bar{R} = \sum_{t=1}^T \sum_{i=1}^N (A + \alpha_i)(I_{it}^A + S_{it}^A),$$

where I_{it}^A is an issue selection for sector i and period t , and S_{it}^A is a sector selection for sector i and period t .

24. (previously presented) A geometric performance attribution method for determining portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , comprising the steps of:

determining attribution effects for issue selection $(1 + I_{it}^G)$ given by

$$1 + I_{it}^G = \frac{1 + w_{it} r_{it}}{1 + w_{it} \bar{r}_{it}} \Gamma_t^I,$$

and determining attribution effects for sector selection $(1 + S_{it}^G)$ given by

$$1 + S_{it}^G = \left(\frac{1 + w_{it} \bar{r}_{it}}{1 + \bar{w}_{it} \bar{r}_{it}} \right) \left(\frac{1 + \bar{w}_{it} \bar{R}_t}{1 + w_{it} \bar{R}_t} \right) \Gamma_t^S,$$

where r_{jt} is a portfolio return for sector j for period t , \bar{r}_{jt} is a benchmark return for sector j for period t , w_{jt} is a weight for r_{jt} , \bar{w}_{jt} is a weight for \bar{r}_{jt} , R is determined by

$$R = \left[\prod_{t=1}^T (1 + R_t) \right] - 1$$

and \bar{R} is determined by

$$\bar{R} = \left[\prod_{t=1}^T (1 + \bar{R}_t) \right] - 1;$$

and determining the portfolio performance as

$$\frac{1 + R}{1 + \bar{R}} = \prod_{t=1}^T \prod_{i=1}^N (1 + I_{it}^G)(1 + S_{it}^G).$$

25-28. (canceled)